## IN THE CLAIMS:

## 1.-16. (canceled)

17. (original) A method for assembling an anemometer, comprising:

providing a cantilever beam having a plurality of bond pads on one side thereof: providing a first substrate and a second substrate, each said substrate being of the same material as said cantilever beam;

etching said first substrate with a plurality of trenches and a sensor cavity; passivating both of said substrates;

disposing a plurality of electrodes on said second substrate;

positioning said cantilever beam in said sensor cavity;

positioning a plug-in pin in each of said trenches; and

mating said first substrate with said second substrate so that said plug-in pins and said bond pads are in intimate contact with said plurality of electrodes.

18. (original) The method according to claim 17, further comprising:

providing a housing having a lengthwise package cavity therethrough and at least one bore that extends into said package cavity;

positioning said mated substrates into said package cavity; and

inserting a fastener into said bore to secure said mated substrates in said housing.

- 19. (original) The method according to claim 18, further comprising:
  - placing a shim along with said mated substrates in said package cavity, such that said shim is between said mated substrates and said fastener.
- 20. (original) The method according to claim 19, wherein said cantilever beam extends outwardly from one end of said housing.
- 21. (original) The method according to claim 20, further comprising:
  installing said housing into an engine wall such that only said cantilever beam extends beyond said engine wall.
- 22. (original) The method according to claim 21, further comprising: connecting diagnostic equipment to said plurality of plug-in pins.